

Application No.: 09/843,051
Amendment Dated: May 14, 2004

In the Claims:

The current claim set of the application is presented below. Indications as to the status of the claims ("original", "currently amended", "cancelled", "new", etc.) appear in parentheses after the claim number. Deletions are identified in bold with strikethrough (e.g. ~~deletion~~) and new text is identified in bold with underlining (e.g. new language).

1. (Currently amended) An implantable medical electrical lead for electrical stimulation of one or more sacral nerves of a human patient, comprising:

a lead body extending between proximal and distal lead ends;

a proximal connector disposed at or near the proximal end of the lead body;

a coil electrode;

an electrode connector operably coupled to the coil electrode; and

at least one lead conductor extending between the proximal connector and the ~~coil~~ electrode connector,

wherein the coil electrode ~~being~~ is disposed at or near a distal portion of the lead and ~~being~~ is electrically connected to the lead conductor, the coil electrode comprising an elongated, flexible coiled wire extending between first and second coil ends, the distance between the first and second coil ends ranging between 0.10 inches and 1.50 inches, the coil electrode having an outer diameter in the range of about 0.5 millimeters to about 2.0 millimeters;

wherein the coil electrode possesses sufficient mechanical flexibility and sufficiently small diameter to permit the distal portion of the lead to be inserted through a foramen of the patient's sacrum into a position near or in operative relation with at least one of the patient's sacral nerves without damaging or causing physical trauma to the at least one sacral nerve as the distal portion of the lead is being implanted by a physician in proximity thereto or after implantation of the lead has occurred, the coil electrode being configured to provide electrical stimulation to the at least one sacral nerve in an amount and manner sufficient to provide therapy for a pelvic floor disorder to the patient.

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2. (Currently amended) The implantable medical electrical lead of Claim 1, wherein the coil electrode and the electrode connector are operatively connected to one another in an annular connection zone.
3. (Currently amended) The implantable medical electrical lead of Claim 1, wherein the coil electrode and the electrode connector are butt-welded together.
4. (Currently amended) The implantable medical electrical lead of Claim 1, wherein the coil electrode and the electrode connector are adhered together.
5. (Previously cancelled)
6. (Previously cancelled)
7. (Previously cancelled)
8. (Currently amended) The implantable electrical medical lead of Claim 1, wherein the coil electrode and the electrode connector have substantially common outer diameters and inner diameters and are axially aligned and coupled together in an annular connection zone.
9. (Currently amended) The implantable medical electrical lead of Claim 1, wherein the coil electrode and the electrode connector have substantially common outer diameters and inner diameters and are axially aligned and butt-welded together in an annular connection zone.
10. (Currently amended) The implantable medical electrical lead of Claim 1, wherein the coil electrode and the electrode connector have substantially common outer diameters and inner diameters and are axially aligned and adhered together in an annular connection zone.
11. (Previously amended) The implantable medical electrical lead of Claim 1, wherein the ~~coil electrode further comprises a~~ electrode connector is ring-shaped member.

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12. (Previously amended) The implantable medical electrical lead of Claim 1, wherein a ring-shaped electrode is positioned distal from the coil electrode.

13. (Previously amended) The implantable medical electrical lead of Claim 1, wherein a ring-shaped electrode is positioned proximal from the coil electrode.

14. (Previously cancelled)

15. (Previously cancelled)

16. (Withdrawn from Consideration) An implantable medical lead for non-direct contact electrical stimulation of the sacral nerves comprising:

a lead body extending between lead proximal and distal ends, the lead body comprising a proximal connector element, an elongated distal mesh electrode, and a lead conductor extending between the connector element and the distal electrode, the distal mesh electrode further comprising an elongated tube surrounding the lead body and electrically connected to the lead conductor having a side wall formed of a lattice framing windows extending through the side wall and imparting flexibility to the elongated distal mesh electrode,

whereby the mesh electrode is capable of being inserted through a foramen of the sacrum into operative relation with a sacral nerve to provide stimulation to the sacral nerve without necessarily being in direct contact with the sacral nerve.

17. (Withdrawn from Consideration) The implantable medical lead of Claim 16, wherein the lead body further comprises a second proximal connector element, a distal ring-shaped electrode spaced from the mesh electrode, and a second lead conductor extending between the second proximal connector element and the distal ring-shaped electrode.

18. (Withdrawn from Consideration) The implantable medical lead of Claim 17, wherein the distal ring-shaped electrode is positioned distal to the mesh electrode.

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19. (Withdrawn from Consideration) The implantable medical lead of Claim 17, wherein the distal ring-shaped electrode is positioned proximal to the mesh electrode.

20. (Withdrawn from Consideration) The implantable medical lead of Claim 17, wherein:
the distal ring-shaped electrode is positioned distal to the mesh electrode.
the lead body further comprises a third proximal connector element, a further ring-shaped electrode positioned proximal to the mesh electrode, and a third lead conductor extends between the third proximal connector element and the further ring-shaped electrode.

21. (New) A method of stimulating a sacral nerve with an implantable medical electrical lead, the lead comprising:

- a lead body extending between proximal and distal lead ends;
- a proximal connector disposed at or near the proximal end of the lead body;
- a coil electrode; and

at least one lead conductor extending between the connector and the coil electrode, the coil electrode being disposed at or near a distal portion of the lead and being electrically connected to the lead conductor, the coil electrode comprising an elongated, flexible coiled wire extending between first and second coil ends, the distance between the first and second coil ends ranging between 0.10 inches and 1.50 inches, the coil electrode having an outer diameter in the range of about 0.5 millimeters to about 2.0 millimeters,

the method comprising:

- locating the coil electrode in proximity to the sacral nerve; and
- stimulating the sacral nerve via the coil electrode.